

REMARKS

In response to an objection, claims 12 and 22 have been amended to refer to “a” vehicle structure.

Objections to Claims

Claims 12 and 22 were objected to as lacking an article before “vehicle structure.” In view of the amendment, it is requested that the objection be withdrawn.

Claim Rejections under 35 USC § 102(b)

Claims 21-22, 24, 26-27 and 30-32 were rejected under 35 U.S.C. § 102(b) as anticipated by United States Patent No. 6,123,355, issued to Sutherland in 2000.

In order to anticipate the invention under Section 102(b), the reference must have been patented or described in a printed publication more than one year prior to the application. Sutherland was patented on September 26, 2000. The present application was filed July 29, 1999. Thus, Sutherland was patented after the present application, and not one year before, and so does not qualify as prior art under Section 102(b). Therefore, it is requested that the reference be withdrawn.

Even if Sutherland is considered, it does not teach or even suggest Applicants’ invention.

It is well known that modern automotive vehicles are equipped with air bags that deploy in front of the driver or front passenger to protect them in the event of a frontal

impact. These air bags are stored in the steering wheel or dashboard. Sutherland describes a window air bag 20, col. 2, lines 38-40, that inflates vertically downward to the side of the occupant, col. 3, lines 28-37, and a headliner air bag 22, col. 3, lines 3-5, that inflates laterally above the occupants head, col. 3, lines 37-49. However, Sutherland relies on conventional front air bags to deploy in front of the occupant to provide the mandated frontal protection. In contrast, Applicants' invention provides a frontal air bag that is mounted on the vehicle pillar. The window and headliner air bags in Sutherland, even though mounted to the pillar, do not replace, but rather augment, the frontal air bags. Nothing in Sutherland contemplates frontal protection. Thus, Sutherland does not anticipate, or even suggest, Applicants' invention.

Claim 21 is directed to Applicants' frontal air bag system that includes a frontal air bag mounted to a front pillar of the vehicle and inflated to extend in front of the occupant. Sutherland describes a window air bag and a headliner air bag that deploy to the side of and above the occupant, but not to the front. Nor does Sutherland suggest deploying the window or headliner air bags in any manner that might interfere with deployment of the standard frontal air bags and reduce protection in the event of a frontal impact. Thus, Sutherland does not teach or suggest Applicants' invention in claim 12.

It follows also that it does not show Applicants' invention in claims 22, 24, 26-27, and 30-32 dependent upon claim 21.

For the reasons above, it is respectfully requested that Sutherland be withdrawn as

a reference, the rejection of the claims based upon Sutherland be withdrawn, and that the claims be allowed.

Claim Rejections under 35 USC § 103

Claims 12-14, 16, 17, and 23 were rejected under 35 U.S.C. § 103 as unpatentable over Sutherland, in view of United States Patent No. 6,234,517, issued to Miyahara et al. in 2001. Claims 16, 17 and 23 were rejected under 35 U.S.C. § 103 as unpatentable over Sutherland, in view of United States Patent No. 5,884,937, issued to Yamada in 1999. Claims 18, 19, and 25 were rejected under 35 U.S.C. § 103 as unpatentable over Sutherland, in view of United States Patent No. 5,615,909, issued to Wipasuramonton et al. in 1997. Claims 28 and 29 were rejected under 35 U.S.C. § 103 as unpatentable over Sutherland, in view of Yamada. Claim 20 was rejected under 35 U.S.C. § 103 as unpatentable over Sutherland, in view of Wipasuramonton et al. and Miyahara et al.

Since all the rejections rely upon Sutherland as the primary reference, it is appropriate to address them together. For the reasons set forth above, Sutherland is not a proper reference under Section 102(b), and even when considered, does not show a frontal air bag, as in Applicants' invention.

The rejection cites three additional references. A fair reading of these references reveals that each describes side air bags that are intended for use in conjunction with conventional frontal air bags, and are designed NOT to deploy into the zone in front of the occupant so as not to interfere with the frontal air bags. Indeed, none of the

references suggest locating a frontal air bag anywhere other than the conventional placement in front of the occupants. Thus, the references do not make up the deficiency in Sutherland.

More particularly, Miyahara et al. describes a side air bag that is mounted to the front pillar and, in the event of a side impact, deploys downward to protect the head of the occupant, col. 4, beginning at line 27. The air bag in Miyahara et al. does not provide frontal protection, and rather relies upon standard frontal air bags for that purpose.

Wipasuramonton et al. describes an air bag that is mounted on the seatback and deployed to the side of the occupant, see Fig. 2. It is noted that the air bag module 80 is positioned behind the occupant. The rearward position would not lead the practitioner to a frontal deployment. Rather, the practitioner would readily appreciate that Wipasuramonton et al., like the other references, relies on standard frontal air bags for frontal protection.

Yamada also discloses a side air bag. Referring to Fig. 6, air bag body 20 covers the upper half of the front side window and protects the head portion of the occupant, col. 2, lines 60-64. When deployed, the air bag body unfolds at the side of the occupant's head, col. 3, lines 66-67. Moreover, as shown in Fig. 6, when air bag body 20 is deployed, as in a side impact, the driver is still able to reach the steering wheel, although presumably a frontal impact would cause frontal air bags to deploy. Again, the practitioner would understand that Yamada is relying on standard frontal air bags to

provide frontal impact protection.

Thus, all the references describe side air bags to augment the protection provided by conventional frontal air bags. None of the reference proposes elimination of frontal air bags, and the practitioner, aware of the importance of frontal impact protection, would not be lead to modify the side air bags to extend in front of the occupant and potentially interfere with the deployment of the frontal air bag. Therefore, no matter how combined, the references fail to suggest Applicants' invention.

Claim 12 is directed to Applicants' frontal air bag system. None of the references relate to a frontal air bag system. The claim calls for a frontal air bag mounted in the vehicle pillar and inflated to extend in front of the occupant. The references only show air bags mounted to pillars or elsewhere that deploy to the side of the occupant. Thus, the references, however combined, cannot suggest Applicants' invention in claim 12, or claims 13-14 and 15-19 dependent thereon.

Claim 20, is directed to a frontal air bag system comprising a frontal air bag that is inflated in front of the occupant, similar to claim 12, and so is not suggested by the references, regardless of how combined. Claims 21-33 are dependent upon claim 20 and so also not shown.

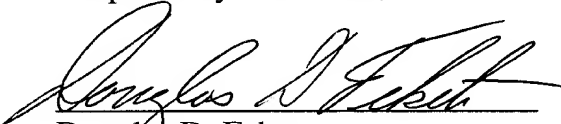
Therefore, it is respectfully requested that the rejection of the claims based upon Sutherland with Miyahara et al., Wipasuramonton et al. and/or Yamada be reconsidered and withdrawn, and that all claims be allowed.

Conclusion

It is believed, in view of the amendments and remarks herein, that all grounds of rejection of the claims have been addressed and overcome, and that all claims are in condition for allowance. If it would further prosecution of the application, the Examiner is urged to contact the undersigned at the phone number provided.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 50-0831.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Douglas D. Fekete", is written over a horizontal line.

Douglas D. Fekete

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